

AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all previous listings and versions of claim in this application.

Claims 1. to 22. (Cancelled)

23. (Currently Amended) A method for operating a protein-containing food product dispenser comprising:

dispensing servings of a protein-containing food or food component from a food delivery mechanism along a dispensing path;

directing a cleansing fluid along a cleansing fluid path which is in fluid association ~~operatively associated~~ with the food delivery mechanism to conduct a cleansing operation on at least a portion of the dispensing path; and

switching between the dispensing of the food or food component and conducting the cleansing operation at a plurality of intervals during a day ~~without substantial intervention of an operator~~ automatically according to a time-controlled cleansing program;

wherein a cleansing fluid consisting of hot water at temperature above about 75°C is directed along the cleansing fluid path at a velocity between about 0.2 to 2.0 m/s to cause flow along the fluid path and to sanitize a portion of the fluid path, and wherein the fluid is directed at intervals occurring once about every ten minutes to about every 12 hours and with the interval including a fluid directing time period of between about 30 seconds to 30 minutes during which period the dispensing of the food product is interrupted.

24. (Cancelled)

25. (Cancelled)

26. (Cancelled)

27. (Cancelled)

28. (Cancelled)

29. (Original) The method of claim 23, wherein the a first cleansing operation is conducted at a first interval a plurality of times before a second, different, cleansing operation is conducted at a second interval.

30. (Original) The method of claim 23, further comprising heating the cleansing fluid in the fluid path.

31. (Original) The method of claim 23, further including automatically determining with a controller device when a cleansing operation will begin and sending a cleansing start signal to initiate the cleansing operation.

32. (Original) The method of claim 31, wherein the cleansing start signal automatically starts a cleansing operation.

33. (Original) The method of claim 31, wherein the cleansing start signal notifies an operator to activate a cleansing operation.

34. (Currently Amended) The method of claim 31, wherein the dispenser includes a source of cleansing fluid so that it is not necessary to connect an external source of cleansing fluid to perform the cleansing operation.

35. (Currently Amended) The method of claim 23, conducted by a controller in a food product dispenser comprising the food delivery mechanism, which mechanism comprises:
a food source configured for receiving a protein-containing food or food component,
a food conduit associated with the food source for receiving the food or food component therefrom, and
a dispensing mechanism configured for dispensing servings of the food or food component from the conduit along the dispensing path; and

the dispenser includes a cleansing mechanism comprising a cleansing conduit in fluid association ~~asseeiated~~ with the food delivery mechanism for directing a cleansing fluid along the cleansing fluid path in cleansing association with the food delivery mechanism under conditions for performing a cleansing operation on at least a portion of the dispensing path;

wherein the controller is operably associated with the cleansing mechanism for activating the cleansing mechanism at the intervals to cleanse the portion of the dispensing path automatically in response to predetermined conditions, and the controller, delivery mechanism and cleansing mechanism are configured to switch between the dispensing of the servings and the cleansing operation.

36. (Currently Amended) The method of claim 35, which further comprises configuring the cleansing mechanism for conducting the cleansing operation without a ~~substantial interruption of the~~ interrupting delivery mechanism of the product.

37. (Previously Presented) The method of claim 36, which further comprises providing the cleansing operation with a duration that is selected to interrupt the dispenser for between about 10 and 20 minutes.

38. (Previously Presented) The method of claim 35, which further comprises providing the dispenser further with an operator annunciator, wherein the controller is operably associated with the annunciator to cause the annunciator to prompt an operator to activate the cleansing operation.

39. (Previously Presented) The method of claim 35, which further comprises providing the dispenser with at least one of a timer and a sensor, the timer configured for timing intervals between cleansing operations, wherein the controller is associated with at least one of the timer and the sensor for activating the cleansing mechanism based on information received from at least one of the timer and the sensor.

40. (Cancelled)

41. (Cancelled)

42. (Previously Presented) The method of claim 35, which further comprises configuring the cleansing mechanism for performing first and second cleansing operations that are different from each other.

43. (Previously Presented) The method of claim 42, which further comprises configuring the controller for automatically operating the cleansing mechanism for selectively conducting the first or second cleansing operation.

44. (Previously Presented) The method of claim 42, wherein the first cleansing operation comprises a sanitizing operation, and the second cleansing operation comprises a cleaning and sanitizing operation.

45. (Previously Presented) The method of claim 42, wherein the first cleansing operation a cleaning operation, and the second cleansing operation comprises a sanitizing operation.

46. (Previously Presented) The method of claim 43, which further comprises configuring the controller is to conduct the first cleansing operation several times per day.

47. (Previously Presented) The method of claim 46, which further comprises configuring the cleansing mechanism to conduct the first cleansing operation using a cleansing fluid including at least one of (i) a detergent, (ii) a caustic material, and (iii) an acid material and the second cleansing operation using hot water.

48. (Currently Amended) The method of claim 35, which further comprises configuring the dispenser to dispense product servings of up to about 10 servings at one time wherein each product serving is sized for consumption by an individual ~~consumption~~.

49. (Previously Presented) The method of claim 48, which further comprises configuring the dispenser to dispense a single serving at a time.

50. (Previously Presented) The method of claim 35, which further comprises configuring the cleansing mechanism for recirculating the cleansing fluid through the cleansing fluid path.

51. (Previously Presented) The method of claim 50, which further comprises providing the dispenser with a heating device configured to heat the cleansing fluid as the cleansing fluid is recirculated through the cleansing fluid path.

52. (Previously Presented) The method of claim 50, which further comprises providing the cleansing mechanism with a reservoir in fluid communication with the cleansing fluid path configured to hold a volume of the cleansing fluid.

53. (Previously Presented) The method of claim 35, which further comprises configuring the controller to activate the cleansing mechanism at predetermined intervals for sanitizing a portion of the delivery mechanism.

54. (Previously Presented) The method of claim 35, which further comprises providing a dispenser housing that houses the food source, food conduit, dispensing mechanism and cleansing mechanism.

55. (Currently Amended) The method of claim 53, wherein the dispenser includes a source of food product and a source of cleansing fluid so that it is unnecessary for an operator to connect an external source of food product or cleansing solution to perform a dispensing or cleansing operation.

56. (Currently Amended) The method of claim 35, wherein the cleansing mechanism is ~~operatively associated~~ in fluid association with the food conduit and dispensing

path and is configured to cleanse each of the food conduit[[,]] and dispensing mechanism ~~and~~
~~cleansing mechanism.~~

57. (New) The method of claim 23, wherein the protein-containing food product is a milk-based product and the hot water has a temperature of between about 75°C and 95°C.

58. (New) A method for operating a protein-containing food product such as milk based liquid food dispenser comprising:

dispensing servings of a protein-containing food or food component from a food delivery mechanism along a dispensing path;

conducting a cleansing operation on at least a portion of the dispensing path by directing first and second cleansing fluids separately along a cleansing fluid path which is operatively associated with the food delivery mechanism and dispensing path; and

switching between the dispensing of the food or food component and the conducting the cleansing operation at a plurality of intervals during a day without substantial intervention of an operator and automatically according to a time controlled cleansing program or upon request of an operator;

wherein a first cleansing fluid is directed along the fluid path to de-soil the fluid path, and

wherein a second cleansing fluid comprising hot water is directed along the fluid path at temperature and time intervals and duration conditions effective to sanitize a portion of the fluid path and maintain hygienic dispensing conditions therein.

59. (New) The method of claim 58, wherein the protein-containing food product is a milk-based product and the hot water has a temperature of between about 75°C and 95°C.

60. (New) The method of claim 58, wherein the second cleansing fluid consists of hot water at temperature above about 75°C and is directed along the fluid path at a velocity between about 0.2 to 2.0 m/s to cause flow along the fluid path and to sanitize the fluid path portion.

61. (New) The method of claim 60, wherein the fluid is directed at intervals occurring once about every ten minutes to about every 12 hours and with the interval including a fluid directing time period of between about 30 seconds to 30 minutes during which period the dispensing of the food product is interrupted.